

W00570

U.S. Department of Commerce
National Oceanic and Atmospheric Administration
National Ocean Service

DESCRIPTIVE REPORT

Type of Survey: Field Examination

Registry Number: W00570

LOCALITY

State(s): Alabama

General Locality: Mississippi Bay

Sub-locality: Grand Bay

2015

CHIEF OF PARTY
Nancy T. DeWitt

LIBRARY & ARCHIVES

Date:

HYDROGRAPHIC TITLE SHEET

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INSTRUCTIONS: The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

State(s): **Alabama**

General Locality: **Mississippi Bay**

Sub-Locality: **Grand Bay**

Scale: **20000**

Dates of Survey: **05/28/2015 to 06/03/2015**

Instructions Dated: **N/A**

Project Number: **ESD-PHB-21**

Field Unit: **US Geological Survey**

Chief of Party: **Nancy T. DeWitt**

Soundings by: **Teledyne Odom Hydrographic Echotrac CV100 (SBES)**

Imagery by: **Klein SSS**

Verification by: **Pacific Hydrographic Branch**

Soundings Acquired in: **meters at Mean Lower Low Water**

Remarks:

Any revisions to the Descriptive Report (DR) applied during office processing are shown in red italic text. The DR is maintained as a field unit product, therefore all information and recommendations within this report are considered preliminary unless otherwise noted. The final disposition of survey data is represented in the NOAA nautical chart products. All pertinent records for this survey are archived at the National Centers for Environmental Information (NCEI) and can be retrieved via <https://www.ncei.noaa.gov/>. Products created during office processing were generated in NAD83 UTM 16N, MLLW. All references to other horizontal or vertical datums in this report are applicable to the processed hydrographic data provided by the field unit.

DESCRIPTIVE REPORT MEMO

October 06, 2021

MEMORANDUM FOR: Pacific Hydrographic Branch

FROM: Report prepared by PHB on behalf of field unit
Nancy T. DeWitt
Principle Investigator, United States Geological Survey

Submission of Survey W00570

SUBJECT:

As part of the Sea-level and Storm Impacts on Estuarine Environments and Shorelines (SSIEES) project, scientists from the U.S. Geological Survey (USGS) St. Petersburg Coastal and Marine Science Center conducted a single-beam bathymetry survey within the estuarine, open-bay, and tidal creek environments of Grand Bay, Alabama-Mississippi. The goal of the SSIEES project is to assess the physical controls of sediment and material exchange between wetlands and estuarine environments along the northern Gulf of Mexico, specifically Grand Bay. The data provides baseline bathymetric information for future research investigating wetland-marsh evolution, sediment transport, erosion, recent and long-term geomorphic change, and can also support the modeling of changes in response to restoration and storm impacts. The survey area encompasses more than 40 square kilometers of Grand Bay's waters.

A 4-meter grid of Grand Bay was created for data archival and charting purposes.

All soundings were reduced to Mean Lower Low Water using VDatum.

The vertical datum for this project is Mean Lower Low Water. The horizontal datum for this project is North American Datum of 1983 (NAD 83). The projection used for this project is Universal Transverse Mercator (UTM) Zone 16.

All survey systems and methods utilized during this survey were as described in "USGS Data Series 1070" available at the URL below.

All data were reviewed for DTONs and none were identified in this survey.

United States Geological Survey acquired the data outlined in this report. Data are available at <https://pubs.usgs.gov/ds/1070>. Additional documentation from the data provider may be attached to this report.

This survey does meet charting specifications and is adequate to supersede prior data.

APPROVAL PAGE

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The survey data meet or exceed the current requirements of the Office of Coast Survey hydrographic data review process and may be used to update NOAA products. The following survey products will be archived at the National Centers for Environmental Information:

- Descriptive Report
- Collection of Bathymetric Attributed Grids (BAGs)
- Collection of acoustic backscatter mosaics
- Geospatial PDF of survey products

Approved: _____

Peter Holmberg, NOAA

Chief (Acting), Pacific Hydrographic Branch